Summary of Soil Test Data.

Station & Offset		Depth From-To	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	% W.C.	SHTL Class.
135+00	50'Rt.	0.8-2.0'	6	4	13	40	37	35	12	16	A-6a
		2.0-8.0'	7	5	16	36	36	35	14	16	A-6a
137+85	50'Rt.	0.8-2.0'	4	4	12	39	41	38	14	14	A-6a
		2.0-5.0'	4	3	10	38	45	42	18	19	A-7-6
		5.0-8.0'	4	3	11	34	48	40	14	27	A-6a
141+00	50'Lt.	0.8-2.0'	4	8	18	44	26	39	8	19	A-4a
		2.0-6.0'	9	3	22	33	30	12	15		A-6a
		6.0-8.0'	10	10	13	36	31	25	8	14	A-4a
144+00	50'Lt.	0.6-1.5'	3	2	43	30	22	23	7	20	A-4a
		1.5-6.0'	4	2	14	40	40	35	15	20	A-6a
		6.0-10.0'	4	11	15	39	31	27	8	16	A-4a
		10.0-13.0'	2	11	15	39	33	23	8	11	A-4a
146+15	49'Rt.	0.8-3.0'	9	9	16	40	26	25	5	10	A-4a
		3.0-8.0'	5	3	22	36	34	30	13	20	A-6a
		8.0-14.0'	10	10	13	38	29	24	8	13	A-4a
		14.0-20.0'	9	9	14	38	30	22	7	12	A-4a
153+15	39'Rt.	0.8-2.0'	5	8	20	32	35	35	11	21	A-6a
		2.0-7.0'	0	1	7	32	60	47	23	22	A-7-6
		7.0-11.5'	14	8	11	35	32	27	9	15	A-4a
		11.5-18.0'	11	9	14	39	27	27	7	12	A-4a
		18.0-24.0'	12	10	15	33	30	21	7	11	A-4a
155+92	49'Rt.	0.8-3.0'	9	8	38	26	19	20	6	12	A-4a
		3.0-9.0'	1	1	5	35	58	39	17	21	A-6b
		9.0-13.0'	11	10	13	35	31	23	8	12	A-4a
159+50	85'Lt.	0.8-2.0'	25	4	39	20	12	NP	NP	11	A-2-4
		2.0-6.0'	4	2	9	35	50	42	18	22	A-7-6
		6.0-8.0'	4	5	9	38	44	31	11	17	A-6a
161+75	50'Rt.	0.6-3.0'	0	4	47	30	19	NP	NP	13	A-4a
		3.0-7.0'	10	10	13	34	33	28	8	15	A-4a
		7.0-8.0'	8	9	14	30	39	27	7	15	A-4a
165+00	90'Rt.	0.6-2.0'	0	4	36	35	25	28	8	10	A-4a
		2.0-4.0'	0	2	21	50	27	27	7	11	A-4b
		4.0-8.0'	9	9	13	36	33	27	8	12	A-4a
Core Boring Samples											
147+64	43'Rt.	10.0-11.0'	7	7	12	39	35	28	11	17	A-6a
		15.0-16.0'	5	8	13	42	32	24	5	12	A-4a
		20.0-21.0'	6	8	13	40	33	23	7	12	A-4a
		25.0-26.0'	26	8	11	30	25	22	7	10	A-4a
		30.0-31.0'	14	10	17	46	13	NP	NP	11	A-4a
		35.0-36.0'	36	2	3	37	21	25	7	12	A-4a
151+76	40'Lt.	5.0-6.0'	74	14	6	4	2	NP	NP	20	A-1-a
		10.0-11.0'	7	7	11	41	34	27	7	16	A-4a
		15.0-16.0'	7	10	12	41	30	22	8	12	A-4a
		20.0-21.0'	9	9	12	42	28	22	6	11	A-4a
		25.0-26.0'	9	9	12	39	30	22	7	11	A-4a
		30.0-31.0'	3	7	16	56	18	17	3	12	A-4b
		35.0-35.5'	Shale Visual							12	

Note: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.

LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 45 SAMPLES TESTED

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Gravel	A-1-a (0)	A-1-a	74	14	6	4	2	NP	NP	20	1
Stone fragments with sand and silt	A-2-4 (0)	A-2-4	25	4	39	20	12	NP	NP	11	1
Sandy silt	A-4 (6)	A-4a	10	8	17	37	28	24	7	13	27
Silt	A-4 (8)	A-4b	2	5	18	53	22	22	5	12	2
Silt and clay	A-6 (9)	A-6a	5	4	15	37	38	34	13	18	10
Silty clay	A-6 (11)	A-6b	1	1	5	35	58	39	17	21	1
Clay	A-7-6 (13)	A-7-6	3	2	9	35	51	44	20	21	3
Shale	Visual classification										

Auger boring - plan view

Core boring - plan view

Auger boring plotted to vertical scale only.

Water content nearly equal to or greater than liquid limit.

This A-4a soil will be rubbery and unstable at water contents which exceed the optimum.

Sod & Topsoil = X' = Approximate depth.

Berm material

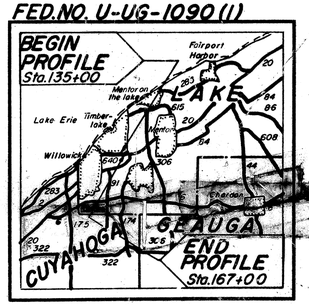
NOTE: Figures beside borings indicate water content in percent.

Sample Taken Lab. Nos. So.
66657-66662 Incl,
67457-67463 Incl,
70895-70927 Incl,

SOIL PROFILE
LAKE COUNTY
LAK-640-2.56
STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS SECURED FOR THE USE OF THE STATE OF OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.

FED. NO. U-UG-1090(1)



LOCATION MAP

Recon.- R.C.C.-8-13-57
Drilling Auger - C.A.S.-8-15-57
Core - S.M.J., F.D.C.-6-25-57
Drafting - R.V.S - 8-27-57